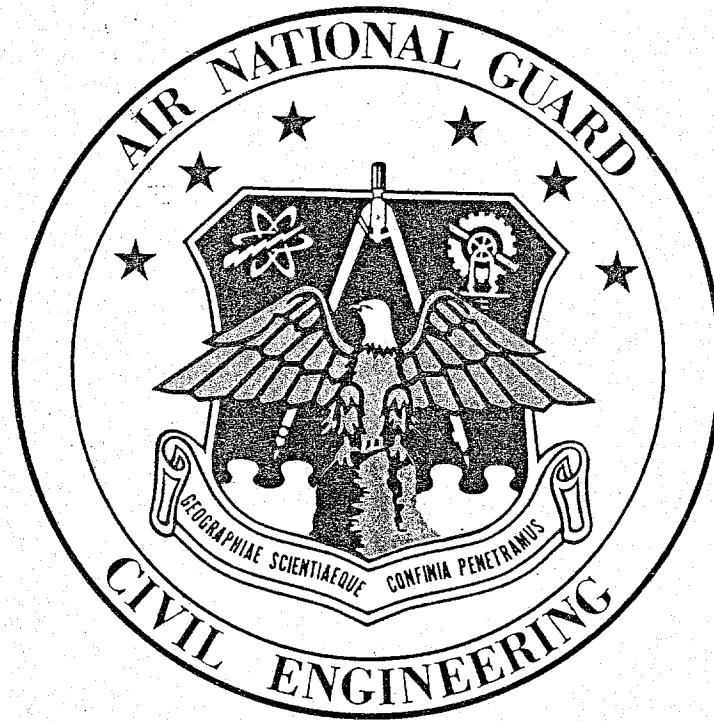


U.S. EXHIBIT E

ASBESTOS MANAGEMENT PROGRAM

*HAWAII AIR NATIONAL GUARD
HICKAM AIR FORCE BASE, HAWAII*



AIR NATIONAL GUARD
CIVIL ENGINEERING
TECHNICAL SERVICES CENTER
MINOT, NORTH DAKOTA

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U.S. EXHIBIT E**1. Introduction****1.1 Overview**

The Air National Guard Readiness Center Civil Engineering Technical Services Center's Asbestos Management Team conducted an asbestos survey at the Hickam ANG Base, Honolulu, HI and its Geographically Separated Units (GSU's) on 13-22 Jan 1992. The survey covered 63 buildings (the following buildings were surveyed at Hickam: 2020, 3061, 3067, 3200, 3379, 3380, 3381, 3382, 3383, 3385, 3386, 3400, 3402, 3404, 3405, 3409, 3410, 3411, 3415, 3416, 3418, 3422, 3426, 3427, 3428, 3429, 3430, 3431, 3432, 3434, 3435, 3436, 3440, 3505, 3510, 3515, 3520, 3525. In addition, the following buildings owned by the Air Force with portions to be loaned to the Guard Unit were sampled: 3004, 1055/34, 1055/35, 1045, 2030/15 and 2030/17. Bldgs at Barbers Point: 1922, 1923, 1668. Bldgs at Barking Sands: 358, 359, 388. Bldgs at Kahului: 501, 502, 503, 504, 505. Bldgs at Hilo: 701, 702, 703, 704, 705, 752, 753, 771).

Air Force Regulation (AFR) 91-42, Air Force Facility Asbestos Management, outlines procedures for developing a base asbestos management program. The base asbestos management program consists of an asbestos management plan (AMP) and an asbestos operating plan (AOP). This report contains an AMP and an AOP which have been developed for Hickam ANG Base and its GSU's and are consistent with AFR 91-42.

1.2 Objectives

The overall objective of the asbestos management program is to ensure that the health and welfare of all base personnel are protected from the potentially harmful effects of asbestos containing material.

The AMP is designed to be a permanent record on the current status and condition of all asbestos containing material (ACM) in this installation's facility inventory. This document provides a single location for the documentation of all asbestos management efforts and the mechanism for oversight of the entire facility asbestos management program.

The AOP is designed to implement the policy established in the AMP and establish procedures for accomplishing asbestos related projects. The focus of both the AMP and AOP is on taking positive action to deal with current and near-term asbestos management needs, rather than on planning solely for future removal of asbestos containing material (ACM) from base facilities.

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Air Guard policy is to manage ACM in place as long as practicable; ideally until a facility with ACM is scheduled for disposal (except in residences, medical facilities, and facilities used by children where any friable asbestos that might lead to exposure should be removed). This requires that installations have specific procedures for managing facilities with ACM and protecting personnel from the hazards associated with airborne fibers from damaged ACM. It is the intention of the Air Guard to remove ACM whenever it is opportune to do so, whenever it is a potential threat to personnel health, and as necessary to comply with applicable regulations. The AOP will provide guidance and procedures for removal of asbestos when the situation warrants. Additionally, it will outline procedures and practices to operate, maintain and repair base facilities in a manner that minimizes releases of asbestos fibers into the air.

1.3 Background

Asbestos is a group of naturally occurring minerals that separate into fibers. Asbestos that is capable of being crumbled, pulverized, or reduced to powder by hand pressure is described as "friable." Inhalation of asbestos fibers has been linked to cancer and other diseases in humans. Appendix B contains a glossary of terms commonly used in asbestos management.

Asbestos is regulated by the Environmental Protection Agency (EPA), the Occupational Safety and Health Administration (OSHA), the Department of Transportation (DOT) and by each state. EPA regulations concerning asbestos are contained in the Code of Federal Regulations (CFR) at 40 CFR Part 61 and 40 CFR Part 763. OSHA regulations are contained at 29 CFR 1926.58 and DOT regulations are contained at 49 CFR 171 and 172. These regulations govern control of asbestos fiber emissions to protect the environment and public health.

1.4 Organizational Roles and Responsibilities

An effective asbestos management program requires the participation and interface of several base organizations to ensure that the health and welfare of all personnel are protected from the potentially harmful effects of friable asbestos containing material. The Base Civil Engineer (BCE), Major Alvin N. Satagata, is responsible for developing and implementing the asbestos program. Other base organizations must assist the BCE in identification of asbestos, asbestos sampling programs, quality control, legal implications, and protecting the health and well-being of all personnel.

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The BCE has appointed Capt Michael Compton as the asbestos program officer (APO). It will be the APO's responsibility to maintain the asbestos management plan and to act as the focal point for asbestos related issues. The APO will also be responsible for coordinating support from other base organizations. Any contact with federal or state regulatory agencies concerning asbestos related matters should be made by the APO.

The BCE has also appointed Mr. John Ito as the asbestos operations officer (AOO). The AOO will act as the focal point for all asbestos abatement operations. The AOO can be the same person as the APO or they can be separate individuals. In the active Air Force the DEEV is the APO and the DEM is the AOO.

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6. No Immediate Action: Little damage to structure with exposure to individuals unlikely so no current action should be taken. Recommend some periodic monitoring.

Any area ranked as 1 should be scheduled for immediate remediation. Areas ranked as 2 should also be scheduled for remediation. Areas ranked as 3 thru 6 should be placed on a recurring inspection program as deemed appropriate by the APO to ensure the condition of the asbestos containing material has not deteriorated. Table 1 contains the hazard assessment summary for the buildings included in the survey.

Based on the GRADE rating and condition, appropriate treatment has been identified for each area. The options include maintain in place, asbestos containing material that is undamaged does not pose a health risk; repair, which involves sealing, encapsulation, or enclosing asbestos containing material to prevent release of asbestos fibers; and removal.

2.3 Asbestos Register

General: The asbestos register is the heart of the asbestos management plan. The register contains a list of all ACM on the base, its location, the type and condition of the material, and all events affecting the material. The register consists of a table listing the sample summary by building (Table 2) and a table listing the abatement priority (Table 3).

The APO will keep the register updated to reflect the current condition of ACM in each facility. Any change in the condition of the ACM and any repairs, removal or enclosure of the ACM will be documented on the "changes that affect sample summary" sheets included in Table 2. If additional samples are taken, the results will be documented on Table 2 and the sample report attached to Appendix C. Appendix C includes a copy of the lab reports from all samples taken during the survey.

2.4 Monitoring and Surveillance:

All locations with friable ACM will be monitored on an on-going basis to ensure that the ACM does not become damaged or deteriorate and pose a risk of exposure to base personnel. The APO will develop a log and institute a program for semi-annual surveillance to check the condition of the ACM and to identify damage and deterioration. A sample building inspection form is shown as Attachment 1. Any changes to the condition of the ACM will be documented in Table 2; and if necessary, changes to the abatement priority list (Table 3) will be made and the ACM will be repaired and/or removed.

U.S. EXHIBIT E Scheduling and Planning:

The APO will initiate procedures that insure that the asbestos register is reviewed prior to the start of any work in buildings containing ACM. The register will also be reviewed prior to the design of any project involving buildings containing ACM. These procedures are further discussed in the AOP.

The APO will develop a program for scheduling asbestos abatement activities based on the resources available and the hazards identified in the building survey. Any activity involving the ACM will be performed in accordance with the procedures identified in the Asbestos Operating Plan.

2.6 Information Dissemination:

Asbestos potentially affects all personnel who use base facilities containing ACM. The general base population should have a good understanding of the potential asbestos health hazards. They also need to understand that undamaged asbestos in good condition poses no inherent hazard. The APO will attempt to increase general base knowledge and awareness of asbestos concerns by disseminating general information to the base population using appropriate base procedures. An asbestos awareness article in the base paper is an excellent way to do this.